



FACT SHEET #5

SAFE LAWN & GARDEN CARE

Why Should I Be Concerned?

Many people find landscaping and gardening to be important parts of healthy life-styles. These activities can also improve both the beauty and the value of your home. However, over-application of fertilizers and the misuse of pesticides could affect the quality and safety of ground water. Any activity that contaminates ground water is a violation of Maine law. In addition, your health and the value of your property are both in jeopardy if your well becomes contaminated.

This fact sheet will help you evaluate whether your landscaping and gardening activities have the potential to contaminate ground water. It will also give you ideas for low impact gardening and landscaping.

Keys to Safe, Effective Lawn Care

A well-groomed, healthy lawn can be a source of pride and can improve the look of your home. **Four keys to safe lawn care include:**

- 💧 **Careful selection of turf varieties**
- 💧 **Moderate fertilization**
- 💧 **Proper maintenance**
- 💧 **Limited pesticide application**

Turf Varieties

Choosing the right variety or blend of species is critical for starting and maintaining a high-quality, healthy lawn. First, choose seed with a high percentage of perennial grasses and a low percentage of annual grasses. An annual grass only lives for one year; it must be reseeded (either naturally or with your help) each year to maintain a dense, thick turf. Second, adjust the species mixture to match the different conditions of the lawn. For example, plant shade-tolerant species near trees or on the north side of the house. In areas of the lawn that receive heavy use,



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consider a mix of seed adapted to wear and tear. A good lawn and garden store should be able to help you select varieties for the different areas of your lawn. Proper variety choices will make for a healthy lawn and will reduce the need for chemical fertilizers and pesticides.

Turf Fertility

Fertility means the amount and availability of nutrients. Many lawns in Maine have an adequate amount of nutrients to maintain an established lawn.

The first step in a lawn fertility program is to have your soil tested. Pick up a soil test kit from your county office of the University of Maine Cooperative Extension and send in a soil sample to the Maine Soil Testing Lab. They will send you a report detailing the levels of important nutrients and recommend a fertilizer formulation.

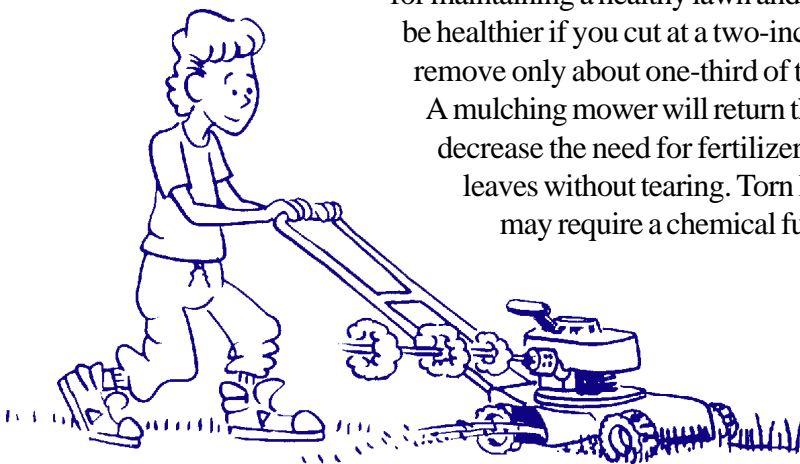
Frequently, an application of lime will be recommended. This may be the most important thing to add to your lawn as it makes many of the nutrients that are there more naturally available. Consider using a slow-release fertilizer to limit the amount of nitrogen released at any one time.

Remember to use caution with fertilizers. Excess fertilizer can burn plants. It can also run off your lawn and pollute streams and lakes. Consider using a non-phosphorus fertilizer in lake watershed areas.

Turf Maintenance

Mowing at the right height and keeping the mower blade sharp are critical for maintaining a healthy lawn and protecting ground water. Your lawn will be healthier if you cut at a two-inch height and remove only about one-third of the grass blade in any one cutting.

A mulching mower will return the grass clippings to the lawn and will decrease the need for fertilizers. A sharp lawnmower blade cuts grass leaves without tearing. Torn leaves are sites for fungal infection, which may require a chemical fungicide to control.



Turf Pesticides

Fortunately, insect damage to turf is not common in Maine. Chinch bugs and white grubs are the major pests found in Maine lawns. While it may become necessary to use pesticides to control these insects, remember that a healthy lawn is less susceptible to insect damage than an unhealthy lawn. Be sure you know what insect is causing the damage before using a pesticide. The Pest Management Office of the University of Maine Cooperative Extension can help you identify insects, and can suggest safe methods to control the pest. You can contact the Pest Management Office at (207) 581-3880 or 491 College Avenue, Orono, ME 04473.

Lawn Weed Control

The most common weeds found in lawns are dandelion, white clover, crab grass and plantain. The most effective control method varies for each weed. Therefore, it is important to correctly identify the weed before you start a control strategy. There are many books available to help you identify weeds, or you can call the Pest Management or county offices of the University of Maine Cooperative Extension for help.

The people at Cooperative Extension can also suggest good control strategies for the weeds found in your lawn. There are a few things to remember about lawn weed control. Many weeds can be controlled without chemicals. With some persistence on your part, hand removal of weeds can be quite effective. If you decide to use a chemical control method, buy only enough product to meet your needs. Apply the product as recommended by the label, and be very careful when applying around your well or near surface waters. Finally, for your own safety, wear the protective clothing recommended on the label.



Dandelion



Crabgrass

Safe, Environmentally Sound Gardening

One of the fastest growing leisure activities is home gardening. Matching this growing interest is a growing market of fertilizer and pest control products that manufacturers try to convince homeowners that they need. **The keys to a healthy garden include:**

- 💧 **Planning**
- 💧 **Soil Fertility**
- 💧 **Selection of varieties**
- 💧 **Cultural practices**
- 💧 **Safe pesticide use and storage**

Planning

With proper planning, a gardener can often avoid pest and weed problems. Use of row covers, early or late plantings, rotation of crops within the garden, and row spacing are ways you can avoid pest problems.

Soil Fertility



As with your lawn, fertilization of your garden should be based on soil test recommendations. Fertilize when plants are established and are able to make best use of the nutrients. Over-fertilization can damage plants and pollute ground water. In your garden, you should also consider using composts. Composts can provide many of the nutrients provided by chemical fertilizers. In addition, composts improve the physical properties of the soil, allowing better retention of water and easier rooting for plants.

Plant Disease-Resistant Species

Plant breeders have been successful in breeding disease-resistant plant stocks. These plants are less likely to be damaged by diseases and insects. The use of disease-resistant plants will help you reduce your use of pesticides.



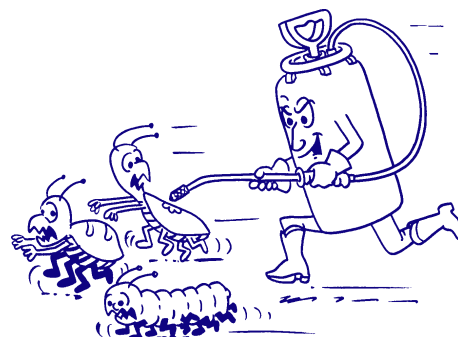
Cultural Practices

Using proper soil preparation techniques, mulching, pruning and crop rotation can all help prevent weed and insect problems, and can reduce or eliminate the need for chemicals. For example, the use of mulches, such as straw and washed seaweed, can control weed growth, and some mulches may provide beneficial nutrients. Mulches also help reduce the amount of water that needs to be applied to the garden. Diseases can be controlled by rotating plants between beds each year, and by removing diseased plants from the garden. The University of Maine Cooperative Extension publishes a number of fact sheets that can give you more information on the subject. A few such sources are [Natural Gardening](#) (Bulletin #2106) and [Home Vegetable Gardening](#) (Bulletin #2078).

Pesticide Use

One of the best ways to protect ground water is to use pesticides only as a last resort. If despite your best efforts, it becomes necessary to use pesticides, consider the following:

- 💧 Identify the pest, and use pest-specific pesticides.
- 💧 Identify the products that can control the pest. Be aware that more and more “natural” pesticides are becoming available.
- 💧 Purchase only the amount of pesticide you need.
- 💧 **READ THE LABEL!!!**
- 💧 Wear appropriate clothing, including all protective gear required by the label.
- 💧 Don't apply pesticides on windy days.



Whenever using chemicals, be prepared for the worst; keep a supply of cat litter or a similar material to absorb a chemical spill. Also, be sure to wear proper clothing if you are cleaning up a spill.

Pesticide Storage

Proper, safe pesticide storage is as important as safe pesticide use. The most important thing to remember is to keep pesticides out of the reach of children. Pesticide poisonings are all too common. You should also store these products in a locked cabinet with a sign noting what is inside. If possible, the cabinet should be well-ventilated and have metal shelves. Keep pesticides in their original containers with the labels intact. The disposal of old and outdated pesticides is a problem. Maine has no official program to help homeowners dispose of unwanted pesticides. To avoid this problem, do not buy more than you can use. Share pesticides with friends and neighbors, and check with friends before buying new products.



Lawn and Garden Care Worksheet

This worksheet will help you assess how your activities at home could impact your drinking water. A low risk means you are practicing safe gardening and lawn care techniques. A high risk does not mean that you have a problem with your ground water supply, but it does indicate that the conditions are right for a problem to develop. If any one category receives a score of three or higher, you should find a way to correct the situation. Contact an organization on the reference sheet for help.

Choose the answer that best describes your situation.

Home Activities	High Risk (4)	Moderate-High Risk (3)	Low-Moderate Risk (2)	Low Risk (1)	Your Rank
Lawn Fertilizer Use	Never soil test, apply fertilizers liberally	Never soil test, apply fertilizers sparingly	Only apply fertilizers based on soil test	Do not apply commercial fertilizers	
Lawn Cutting Practices	Do not maintain mower, cut at less than 2-inch height	Cut grass as needed at a 2-inch height	Cut grass as needed at 2-inch height, do not sharpen mower blade	Cut grass as needed at a 2-inch height with a sharp blade	
Lawn Pesticide Use	Use herbicides and pesticides as preventative measures, when pests or weeds are apparent	Use herbicides and pesticides after pests are apparent	Use herbicides and insecticides only when necessary and only after identifying pest or weed	Never use herbicides or insecticides	
Garden Insect Control	Insecticides used to prevent infestation, label rates not followed	Use general-use insecticides on identified pests at label rates	Use only pest-specific pesticides at label rates	Rotate plants, monitor pests, never use insecticides	
Garden Weed Control	Regularly use herbicides, label rates not followed	Spot apply herbicides as necessary, following label rates	Use tillage to control weeds	Use mulches and hand weeding only	
Pesticide Storage	Store in unsecured location (example - under kitchen sink)	Store out of reach of children	Stored in a locked steel cabinet	Store no pesticides	

